Package 'rtweet'

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Author Michael W. Kearney [aut, cre] (https://orcid.org/0000-0002-0730-4694)
Maintainer Michael W. Kearney <kearneymw@missouri.edu></kearneymw@missouri.edu>
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rtweet-package

rtweet: Collecting Twitter data

Description

rtweet provides users a range of functions designed to extract data from Twitter's REST and streaming APIs.

Details

It has three main goals:

- Formulate and send requests to Twitter's REST and stream APIs.
- Retrieve and iterate over returned data.
- Wrangling data into tidy structures.

Author(s)

Maintainer: Michael W. Kearney <kearneymw@missouri.edu> (0000-0002-0730-4694)

See Also

Useful links:

- https://CRAN.R-project.org/package=rtweet
- Report bugs at https://github.com/mkearney/rtweet/issues

```
## Not run:
## for instructions on access tokens, see the tokens vignette
vignette("auth")

## for a quick demo check the rtweet vignette
vignette("rtweet")

## End(Not run)
```

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as_screenname

Coerces user identifier(s) to be evaluated as a screen name(s).

Description

Coerces user identifier(s) to be evaluated as a screen name(s).

Usage

```
as_screenname(x)
as_userid(x)
```

Arguments

Х

A vector consisting of one or more Twitter user identifiers (i.e., screen names or user IDs).

Details

Default rtweet function behaviors will treat "1234" as a user ID, but the inverse (i.e., treating "2973406683" as a screen name) should rarely be an issue. However, in those cases, users may need to mix both screen names and user IDs. To do so, make sure to combine them as a list (and not a character vector, which will override conflicting user identifier classes). See examples code for example of mixing user IDs with screen names. Note: this only works with certain functions, e.g., get_friends, get_followers.

Value

A vector of class screen_name or class user_id

See Also

Other users: lists_subscribers, lookup_users, search_users, tweets_with_users, users_data

```
## Not run:
## get friends list for user with the handle "1234"
get_friends(as_screenname("1234"))

## as_screenname coerces all elements to class "screen_name"
sns <- as_screenname(c("kearneymw", "1234", "jack"))
class(sns)

## print will display user class type
sns

## BAD: combine user id and screen name using c()</pre>
```

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```
users <- c(as_userid("2973406683"), as_screenname("1234"))
class(users)

## GOOD: combine user id and screen name using list()
users <- list(as_userid("2973406683"), as_screenname("1234"))
users

## get friend networks for each user
get_friends(users)

## End(Not run)</pre>
```

bearer_token

Bearer token

Description

Converts oauth token into bearer token

Usage

```
bearer_token(token = NULL)
```

Arguments

token

Oauth token created via create_token.

Value

A bearer token

create_token

Creating Twitter authorization token(s).

Description

Sends request to generate OAuth 1.0 tokens. Twitter also allows users to create user-only (OAuth 2.0) access token. Unlike the 1.0 tokens, OAuth 2.0 tokens are not at all centered on a host user. Which means these tokens cannot be used to send information (follow requests, Twitter statuses, etc.). If you have no interest in those capabilities, then 2.0 OAuth tokens do offer some higher rate limits. At the current time, the difference given the functions in this package is trivial, so I have yet to verified OAuth 2.0 token method. Consequently, I encourage you to use 1.0 tokens.

Usage

```
create_token(app = "mytwitterapp", consumer_key, consumer_secret,
  access_token = NULL, access_secret = NULL, set_renv = TRUE)
```

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Arguments

app Name of user created Twitter application

consumer_key Application API key

consumer_secret

Application API secret User-owned application must have Read and write

access level and Callback URL of http://127.0.0.1:1410.

access_token Access token as supplied by Twitter (apps.twitter.com)
access_secret Access secret as supplied by Twitter (apps.twitter.com)

set_renv Logical indicating whether to save the created token as the default environ-

ment twitter token variable. Defaults to TRUE, meaning the token is saved to user's home directory as ".rtweet_token.rds" (or, if that already exists, then .rtweet_token1.rds or .rtweet_token2.rds, etc.) and the path to the token to said token is then set in the user's .Renviron file and re- read to start being used in

current active session.

Value

Twitter OAuth token(s) (Token1.0).

See Also

https://developer.twitter.com/en/docs/basics/authentication/overview/oauth

Other tokens: get_tokens, rate_limit

direct_messages Get direct messages sent to and received by the authenticating user from the past 30 days

Description

Returns all Direct Message events (both sent and received) within the last 30 days. Sorted in reverse-chronological order.

Usage

```
direct_messages(n = 50, next_cursor = NULL, parse = TRUE,
    token = NULL)

direct_messages_sent(since_id = NULL, max_id = NULL, n = 200,
    parse = TRUE, token = NULL)
```

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Arguments

n	optional Specifies the number of direct messages to try and retrieve, up to a maximum of 50.
next_cursor	If there are more than 200 DMs in the last 30 days, responses will include a next_cursor value, which can be supplied in additional requests to scroll through pages of results.
parse	Logical indicating whether to convert response object into nested list. Defaults to true.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.
since_id	optional Returns results with an ID greater than (that is, more recent than) the specified ID. There are limits to the number of Tweets which can be accessed through the API. If the limit of Tweets has occurred since the since_id, the since_id will be forced to the oldest ID available.
max_id	Character, returns results with an ID less than (that is, older than) or equal to 'max_id'.

Details

Includes detailed information about the sender and recipient user. You can request up to 50 direct messages per call, and only direct messages from the last 30 days will be available using this endpoint.

Important: This method requires an access token with read, write, and direct message permissions. To change your application's permissions, navigate to apps.twitter.com, select the appropriate application, click the "permissions" tab. Once you' have made changes to the application permission settings, you will need to regenerate your token before those effect of those changes can take effect.

Value

Return parsed or non-parsed response object.

```
## Not run:
## get my direct messages
dms <- direct_messages()
## inspect data structure
str(dms)
## End(Not run)</pre>
```

direct_messages_received

(DEPRECATED) Get the most recent direct messages sent to the authenticating user.

Description

Retrieves up to 200 of the most recently received direct messages by the authenticating (home) user. This function requires access token with read, write, and direct messages access.

Usage

```
direct_messages_received(since_id = NULL, max_id = NULL, n = 200,
    parse = TRUE, token = NULL)
```

Arguments

since_id	optional Returns results with an ID greater than (that is, more recent than) the specified ID. There are limits to the number of Tweets which can be accessed through the API. If the limit of Tweets has occurred since the since_id, the since_id will be forced to the oldest ID available.
max_id	Character, returns results with an ID less than (that is, older than) or equal to 'max_id'.
n	optional Specifies the number of direct messages to try and retrieve, up to a maximum of 200. The value of count is best thought of as a limit to the number of Tweets to return because suspended or deleted content is removed after the count has been applied.
parse	Logical indicating whether to convert response object into nested list. Defaults to true.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Details

Includes detailed information about the sender and recipient user. You can request up to 200 direct messages per call, and only the most recent 200 direct messages will be available using this endpoint.

Important: This method requires an access token with read, write, and direct message permissions. To change your application's permissions, navigate to apps.twitter.com, select the appropriate application, click the "permissions" tab. Once you' have made changes to the application permission settings, you will need to regenerate your token before those effect of those changes can take effect.

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Value

Return object converted to nested list. If status code of response object is not 200, the response object is returned directly.

Examples

```
## Not run:
## get my direct messages
dms <- direct_messages_received()
## inspect data structure
str(dms)
## get direct messages I've sent
sdms <- direct_messages_sent()
## inspect data structure
str(dms)
## End(Not run)</pre>
```

do_call_rbind

Binds list of data frames while preserving attribute (tweets or users) data.

Description

Row bind lists of tweets/users data whilst also preserving and binding users/tweets attribute data.

Usage

```
do_call_rbind(x)
```

Arguments

Х

List of parsed tweets data or users data, each of which presumably contains an attribute of the other (i.e., users data contains tweets attribute; tweets data contains users attribute).

Value

A single merged (by row) data frame (tbl) of tweets or users data that also contains as an attribute a merged (by row) data frame (tbl) of its counterpart, making it accessible via the users_data or tweets_data extractor functions.

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See Also

Other parsing: tweets_with_users

Examples

```
## Not run:
## lapply through three different search queries
lrt <- lapply(
    c("rstats OR tidyverse", "data science", "python"),
    search_tweets,
    n = 5000
)

## convert list object into single parsed data rame
rt <- do_call_rbind(lrt)

## preview tweets data
rt

## preview users data
users_data(rt)

## End(Not run)</pre>
```

emojis

Emojis codes and descriptions data.

Description

This data comes from "Unicode.org", http://unicode.org/emoji/charts/full-emoji-list.html. The data are codes and descriptions of Emojis.

Usage

 ${\it emojis}$

Format

A tibble with two variables and 2,623 observations.

```
head(emojis)
```

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flatten

flatten/unflatten data frame

Description

Converts list columns that containing all atomic elements into character vectors and vice versa (for appropriate named variables according to the rtweet package)

Usage

```
flatten(x)
unflatten(x)
```

Arguments

Х

Data frame with list columns or converted-to-character (flattened) columns.

Details

If recursive list columns are contained within the data frame, relevant columns will still be converted to atomic types but output will also be accompanied with a warning message.

'flatten' flattens list columns by pasting them into a single string for each observations. For example, a tweet that mentions four other users, for the mentions_user_id variable, it will include the four user IDs separated by a space.

'unflatten" splits on spaces to convert into list columns any columns with the following names: hashtags, symbols, urls_url, urls_t.co, urls_expanded_url, media_t.co, media_expanded_url, media_type, ext_media_url, ext_media_t.co, ext_media_expanded_url, mentions_user_id, mentions_screen_name, geo_coords, coords_coords, bbox_coords, mentions_screen_name

Value

If flattened, then data frame where non-recursive list columns—that is, list columns that contain only atomic, or non-list, elements—have been converted to character vectors. If unflattened, this function splits on spaces columns originally returned as lists by functions in rtweet package. See details for more information.

See Also

```
Other datafiles: read_twitter_csv, write_as_csv
Other datafiles: read_twitter_csv, write_as_csv
```

get_collections

get_collections	Get collections by user or status id.	
-----------------	---------------------------------------	--

Description

Find collections (themed grouping of statuses) created by specific user or status id. Results include user, status, and collection features.

Usage

```
get_collections(user, status_id = NULL, n = 200, cursor = NULL,
    parse = TRUE, token = NULL)
```

Arguments

user	Screen name or user id of target user. Requests must provide a value for one of user or status_id.
status_id	Optional, the identifier of the tweet for which to return results. Requests must provide a value for one of user or status_id.
n	Maximum number of results to return. Defaults to 200.
cursor	Page identifier of results to retrieve. If parse = TRUE, the next cursor value for any given request—if available—is stored as an attribute, accessible via next_cursor
parse	Logical indicating whether to convert response object into nested list. Defaults to true.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Value

Return object converted to nested list if parsed otherwise an HTTP response object is returned.

```
## Not run:
## lookup a specific collection
cnnc <- get_collections("cnn")
## inspect data
str(cnnc)
## by status id
wwe <- get_collections(status_id = "925172982313570306")</pre>
```

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```
## inspect data
str(wwe)
## End(Not run)
```

get_favorites

Get tweets data for statuses favorited by one or more target users.

Description

Returns up to 3,000 statuses favorited by each of one or more specific Twitter users.

Usage

```
get_favorites(user, n = 200, since_id = NULL, max_id = NULL,
    parse = TRUE, token = NULL)
```

Arguments

user	Vector of user names, user IDs, or a mixture of both.
n	Specifies the number of records to retrieve. Defaults to 200. 3000 is the max number of favorites returned per token. Due to suspended or deleted content, this function may return fewer tweets than the desired (n) number. Must be of length 1 or of length equal to the provided number of users.
since_id	Returns results with an status_id greater than (that is, more recent than) the specified status_id. There are limits to the number of tweets returned by the REST API. If the limit is hit, since_id is adjusted (by Twitter) to the oldest ID available.
max_id	Character, returns results with an ID less than (that is, older than) or equal to 'max_id'.
parse	Logical, indicating whether to return parsed vector or nested list object. By default, parse = TRUE saves you the time [and frustrations] associated with disentangling the Twitter API return objects.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Value

A tbl data frame of tweets data with users data attribute.

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See Also

```
https://developer.twitter.com/en/docs/tweets/post-and-engage/api-reference/get-favorites-list
Other tweets: get_mentions, get_my_timeline, get_timeline, lists_statuses, lookup_statuses, search_tweets, tweets_data, tweets_with_users
```

Examples

```
## Not run:
## get max number of statuses favorited by KFC
kfc <- get_favorites("KFC", n = 3000)
kfc

## get 400 statuses favorited by each of three users
favs <- get_favorites(c("Lesdoggg", "pattonoswalt", "meganamram"))
favs

## End(Not run)</pre>
```

get_followers

Get user IDs for accounts following target user.

Description

Returns a list of user IDs for the accounts following specified user. To return more than 75,000 user IDs in a single call (the rate limit maximum), set "retryonratelimit" to TRUE.

Usage

```
get_followers(user, n = 5000, page = "-1", retryonratelimit = FALSE,
parse = TRUE, verbose = TRUE, token = NULL)
```

Arguments

user

Screen name or user ID of target user from which the user IDs of followers will be retrieved.

n

Number of followers to return. Defaults to 5000, which is the max number of followers returned by a single API request. Twitter allows up to 15 of these requests every 15 minutes, which means 75,000 is the max number of followers to return without waiting for the rate limit to reset. If this number exceeds either 75,000 or the remaining number of possible requests for a given token, then the returned object will only return what it can (less than n) unless retryonratelimit is set to true.

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page

Default page = -1 specifies first page of JSON results. Other pages specified via cursor values supplied by Twitter API response object. If parse = TRUE then the cursor value can be extracted from the return object by using the next_cursor function.

retryonratelimit

If you'd like to retrieve more than 75,000 followers in a single call, then set retryonratelimit = TRUE and this function will use base Sys.sleep until rate limits reset and the desired n is achieved or the number of total followers is exhausted. This defaults to FALSE. See details for more info regarding possible

issues with timing misfires.

parse Logical, indicating whether to return parsed vector or nested list object. By

default, parse = TRUE saves you the time [and frustrations] associated with

disentangling the Twitter API return objects.

verbose Logical indicating whether or not to print messages. Only relevant if retryon-

ratelimit = TRUE. Defaults to TRUE, prints sleep times and followers gathered

counts.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Details

When retryonratelimit = TRUE this function internally makes a rate limit API call to get information on (a) the number of requests remaining and (b) the amount of time until the rate limit resets. So, in theory, the sleep call should only be called once between waves of data collection. However, as a fail safe, if a system's time is calibrated such that it expires before the rate limit reset, or if, in another session, the user dips into the rate limit, then this function will wait (use Sys.sleep for a second time) until the next rate limit reset. Users should monitor and test this before making especially large calls as any systematic issues could create sizable inefficiencies.

Value

A tibble data frame of follower IDs (one column named "user_id").

See Also

```
https://developer.twitter.com/en/docs/accounts-and-users/follow-search-get-users/api-reference/get-followers-ids

Other ids: get_friends, next_cursor
```

```
## Not run:
## get 5000 ids of users following the KFC account
(kfc <- get_followers("KFC"))</pre>
```

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```
## get max number [per fresh token] of POTUS follower IDs
(pres <- get_followers("potus", n = 75000))

## resume data collection (warning: rate limits reset every 15 minutes)
pres2 <- get_followers("potus", n = 75000, page = next_cursor(pres))

## store next cursor in object before merging data
nextpage <- next_cursor(pres2)

## merge data frames
pres <- rbind(pres, pres2)

## store next cursor as an attribute in the merged data frame
attr(pres, "next_cursor") <- next_page

## view merged ddata
pres

## End(Not run)</pre>
```

get_friends

Get user IDs of accounts followed by target user(s).

Description

Returns a list of user IDs for the accounts following BY one or more specified users. To return the friends of more than 15 users in a single call (the rate limit maximum), set "retryonratelimit" to TRUE.

Usage

```
get_friends(users, n = 5000, retryonratelimit = FALSE, page = "-1",
   parse = TRUE, verbose = TRUE, token = NULL)
```

Arguments

users

Screen name or user ID of target user from which the user IDs of friends (accounts followed BY target user) will be retrieved.

n

Number of friends (user IDs) to return. Defaults to 5,000, which is the maximum returned by a single API call. Users are limited to 15 of these requests per 15 minutes. Twitter limits the number of friends a user can have to 5,000. To follow more than 5,000 accounts (to have more than 5 thousand "friends") accounts must meet certain requirements (e.g., a certain ratio of followers to friends). Consequently, the vast majority of users follow fewer than five thousand accounts. This function has been oriented accordingly (i.e., it assumes the maximum value of n is 5000). To return more than 5,000 friends for a single

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user, call this function multiple times with requests after the first using the page parameter.

retryonratelimit

If you'd like to retrieve 5,000 or fewer friends for more than 15 target users, then set retryonratelimit = TRUE and this function will use base Sys.sleep until rate limits reset and the desired number of friend networks is retrieved. This defaults to FALSE. See details for more info regarding possible issues with

timing misfires.

page Default page = -1 specifies first page of JSON results. Other pages specified

via cursor values supplied by Twitter API response object. This is only relevant

if a user has over 5000 friends (follows more than 5000 accounts).

parse Logical, indicating whether to return parsed vector or nested list object. By

default, parse = TRUE saves you the time [and frustrations] associated with

disentangling the Twitter API return objects.

verbose Logical indicating whether or not to include output messages. Defaults to TRUE,

which includes printing a success message for each inputted user.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Details

When retryonratelimit = TRUE this function internally makes a rate limit API call to get information on (a) the number of requests remaining and (b) the amount of time until the rate limit resets. So, in theory, the sleep call should only be called once between waves of data collection. However, as a fail safe, if a system's time is calibrated such that it expires before the rate limit reset, or if, in another session, the user dips into the rate limit, then this function will wait (use Sys.sleep for a second time) until the next rate limit reset. Users should monitor and test this before making especially large calls as any systematic issues could create sizable inefficiencies.

Value

A tibble data frame with two columns, "user" for name or ID of target user and "user_id" for follower IDs.

See Also

https://developer.twitter.com/en/docs/accounts-and-users/follow-search-get-users/api-reference/get-friends-ids

Other ids: get_followers, next_cursor

Examples

Not run:

get_mentions

```
## get user ids of accounts followed by Donald Trump
(djt <- get_friends("realDonaldTrump"))

## get user ids of accounts followed by (friends) KFC, Trump, and Nate Silver.
(fds <- get_friends(c("kfc", "jack", "NateSilver538")))

## End(Not run)</pre>
```

get_mentions

Get mentions for the authenticating user.

Description

Returns data on up to 200 of the most recent mentions (Tweets containing a users's screen_name) of the authenticating user.

Usage

```
get_mentions(n = 200, since_id = NULL, max_id = NULL, parse = TRUE,
token = NULL, ...)
```

Arguments

n	Specifies the number of Tweets to try and retrieve, up to a maximum of 200 (the default). The value of count is best thought of as a limit to the number of tweets to return because suspended or deleted content is removed after the count has been applied.
since_id	Returns results with an ID greater than (that is, more recent than) the specified ID. There are limits to the number of Tweets which can be accessed through the API. If the limit of Tweets has occurred since the since_id, the since_id will be forced to the oldest ID available.
max_id	Character, returns results with an ID less than (that is, older than) or equal to 'max_id'.
parse	Logical indicating whether to convert the response object into an R list. Defaults to TRUE.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.
	Other arguments passed as parameters in composed API query.

Details

The timeline returned is the equivalent of the one seen when you view your mentions on twitter.com. This method can only return up to 800 tweets.

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Value

Tibble of mentions data.

See Also

https://developer.twitter.com/en/docs/tweets/timelines/api-reference/get-statuses-mentions_timeline

Other tweets: get_favorites, get_my_timeline, get_timeline, lists_statuses, lookup_statuses, search_tweets, tweets_data, tweets_with_users

Examples

```
## Not run:
## get most recent 200 mentions of authenticating user
mymentions <- get_mentions()
## view data
mymentions
## End(Not run)</pre>
```

get_my_timeline

Get your timeline

Description

Returns a collection of the most recent Tweets and Retweets posted by the authenticating user and the users they follow. The home timeline is central to how most users interact with the Twitter service.

The authenticating user is determined from the token.

Usage

```
get_my_timeline(n = 100, max_id = NULL, parse = TRUE, check = TRUE,
  token = NULL, ...)
```

Arguments

n	Number of tweets to return per timeline. Defaults to 100. Must be of length 1
	or equal to length of user.

max_id Character, returns results with an ID less than (that is, older than) or equal to max_id.

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parse	Logical, indicating whether to return parsed (data.frames) or nested list object. By default, parse = TRUE saves users from the time (and frustrations) associated with disentangling the Twitter API return objects.
check	Logical indicating whether to remove check available rate limit. Ensures the request does not exceed the maximum remaining number of calls. Defaults to TRUE.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what create_token() sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., vignettes("auth", "rtweet") or see ?tokens.
	Further arguments passed on as parameters in API query.

Value

A tbl data frame of tweets data with users data attribute.

See Also

```
https://developer.twitter.com/en/docs/tweets/timelines/api-reference/get-statuses-home_timeline
```

Other tweets: get_favorites, get_mentions, get_timeline, lists_statuses, lookup_statuses, search_tweets, tweets_data, tweets_with_users

Examples

```
## Not run:
tweets_from_me_and_the_ppl_i_follow <- get_my_timeline(n = 3200)
## End(Not run)</pre>
```

get_retweeters

Get user IDs of users who retweeted a given status.

Description

Returns user IDs of users who retweeted a given status. At the current time, this function is limited in returning a maximum of 100 users for a given status.

Usage

```
get_retweeters(status_id, n = 100, parse = TRUE, token = NULL)
```

get_retweets 21

Arguments

status_id required The status ID of the desired status.

n Specifies the number of records to retrieve. Best if intervals of 100.

parse Logical indicating whether to convert the response object into an R list. Defaults

to TRUE.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Details

At time of writing, pagination offers no additional data. See the post from Pipes here: https://twittercommunity.com/t/paging-is-not-possible-with-statuses-retweeters-ids-json/71298/8

Value

data

See Also

Other retweets: get_retweets

get_retweets

Get the most recent retweets of a specific Twitter status

Description

Returns a collection of the 100 most recent retweets of a given status. NOTE: Twitter's API is currently limited to 100 or fewer retweeters.

Usage

```
get_retweets(status_id, n = 100, parse = TRUE, token = NULL, ...)
```

Arguments

status_id required The numerical ID of the desired status.

n optional Specifies the number of records to retrieve. Must be less than or equal

to 100.

parse Logical indicating whether to convert the response object into an R list. Defaults

to TRUE.

22 get_timeline

Every user should have their own Oauth (Twitter API) token. By default token = NULL token

> this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Other arguments used as parameters in the query sent to Twitter's rest API, for

example, trim_user = TRUE.

Details

NOTE: Twitter's API is currently limited to 100 or fewer retweeters.

Value

Tweets data of the most recent retweets of a given status

See Also

Other retweets: get_retweeters

get_timeline Get one or more user timelines (tweets posted by target user(s)).

Description

Returns up to 3,200 statuses posted to the timelines of each of one or more specified Twitter users.

Usage

```
get_timeline(user, n = 100, max_id = NULL, home = FALSE,
 parse = TRUE, check = TRUE, token = NULL, ...)
get_timelines(user, n = 100, max_id = NULL, home = FALSE,
  parse = TRUE, check = TRUE, token = NULL, ...)
```

Arguments

user	Vector of user names, user IDs, or a mixture of both.
n	Number of tweets to return per timeline. Defaults to 100. Must be of length 1 or equal to length of user.
max_id	Character, returns results with an ID less than (that is, older than) or equal to ' \max_i d'.
home	Logical, indicating whether to return a user-timeline or home-timeline. By default, home is set to FALSE, which means get_timeline returns tweets posted by the given user. To return a user's home timeline feed, that is, the tweets posted by accounts followed by a user, set the home to false.

get_timeline 23

Logical, indicating whether to return parsed (data.frames) or nested list object.

By default, parse = TRUE saves users from the time [and frustrations] associated with disentangling the Twitter API return objects.

Check

Logical indicating whether to remove check available rate limit. Ensures the request does not exceed the maximum remaining number of calls. Defaults to TRUE.

token

Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Further arguments passed on as parameters in API query.

Value

. . .

A tbl data frame of tweets data with users data attribute.

See Also

https://developer.twitter.com/en/docs/tweets/timelines/api-reference/get-statuses-user_timeline

Other tweets: get_favorites, get_mentions, get_my_timeline, lists_statuses, lookup_statuses, search_tweets, tweets_data, tweets_with_users

```
## Not run:
## get most recent 3200 tweets posted by Donald Trump's account
djt <- get_timeline("realDonaldTrump", n = 3200)

## data frame where each observation (row) is a different tweet
djt

## users data for realDonaldTrump is also retrieved
users_data(djt)

## retrieve timelines of mulitple users
tmls <- get_timeline(c("KFC", "ConanOBrien", "NateSilver538"), n = 1000)

## it's returned as one data frame
tmls

## count observations for each timeline
table(tmls$screen_name)

## End(Not run)</pre>
```

24 get_tokens

get_tokens

Fetching Twitter authorization token(s).

Description

Call function used to fetch and load Twitter OAuth tokens. Since Twitter application key should be stored privately, users should save the path to token(s) as an environment variable. This allows Tokens to be instantly [re]loaded in future sessions. See the "tokens" vignette for instructions on obtaining and using access tokens.

Usage

```
get_tokens()
get_token()
```

Details

This function will search for tokens using R, internal, and global environment variables (in that order).

Value

Twitter OAuth token(s) (Token1.0).

See Also

```
Other tokens: create_token, rate_limit
```

```
## Not run:
## fetch default token(s)
token <- get_tokens()
## print token
token
## End(Not run)</pre>
```

get_trends 25

get_trends	Get Twitter trends data.
------------	--------------------------

Description

Get Twitter trends data.

Usage

```
get_trends(woeid = 1, lat = NULL, lng = NULL,
   exclude_hashtags = FALSE, token = NULL, parse = TRUE)
```

Arguments

woeid	Numeric, WOEID (Yahoo! Where On Earth ID) or character string of desired town or country. Users may also supply latitude and longitude coordinates to fetch the closest available trends data given the provided location. Latitude/longitude coordinates should be provided as WOEID value consisting of 2 numeric values or via one latitude value and one longitude value (to the appropriately named parameters). To browse all available trend places, see trends_available
lat	Optional alternative to WOEID. Numeric, latitude in degrees. If two coordinates are provided for WOEID, this function will coerce the first value to latitude.
lng	Optional alternative to WOEID. Numeric, longitude in degrees. If two coordinates are provided for WOEID, this function will coerce the second value to longitude.
exclude_hashtags	
	Logical, indicating whether or not to exclude hashtags. Defaults to FALSE-meaning, hashtags are included in returned trends.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.
parse	Logical, indicating whether or not to parse return trends data. Defaults to true.

Value

Tibble data frame of trends data for a given geographical area.

See Also

Other trends: trends_available

26 invalidate_bearer

Examples

```
## Not run:
## Retrieve available trends
trends <- trends_available()</pre>
trends
## Store WOEID for Worldwide trends
worldwide <- trends$woeid[grep("world", trends$name, ignore.case = TRUE)[1]]</pre>
## Retrieve worldwide trends datadata
ww_trends <- get_trends(worldwide)</pre>
## Preview trends data
ww_trends
## Retrieve trends data using latitude, longitude near New York City
nyc_trends <- get_trends_closest(lat = 40.7, lng = -74.0)</pre>
## should be same result if lat/long supplied as first argument
nyc_trends <- get_trends_closest(c(40.7, -74.0))</pre>
## Preview trends data
nyc_trends
## Provide a city or location name using a regular expression string to
## have the function internals do the WOEID lookup/matching for you
(luk <- get_trends("london"))</pre>
## End(Not run)
```

invalidate_bearer

Invalidate bearer token

Description

Invalidate bearer token

Usage

```
invalidate_bearer(token = NULL)
```

Arguments

token

Oauth token created via create_token.

langs 27

langs

Language codes recognized by Twitter data.

Description

This data comes from the Library of Congress, http://www.loc.gov/standards/iso639-2/ISO-639-2_utf-8.txt. The data are descriptions and codes associated with internationally recognized languages. Variables include translations for each language represented as bibliographic, terminologic, alpha, english, and french.

Usage

langs

Format

A tibble with five variables and 486 observations.

Examples

head(langs)

lat_lng

Adds single-point latitude and longitude variables to tweets data.

Description

Appends parsed Twitter data with latitude and longitude variables using all available geolocation information.

Usage

```
lat_lng(x, coords = c("coords_coords", "bbox_coords", "geo_coords"))
```

Arguments

Х

Parsed Twitter data as returned by various rtweet functions. This should be a data frame with variables such as "bbox_coords", "coords_coords", and "geo_coords" (among other non-geolocation Twitter variables).

coords

Names of variables containing latitude and longitude coordinates. Priority is given to bounding box coordinates (each obs consists of eight entries) followed by the supplied order of variable names. Defaults to "bbox_coords", "coords_coords", and "geo_coords") (which are the default column names of data returned by most status-oriented rtweet functions).

28 lists_members

Details

On occasion values may appear to be outliers given a previously used query filter (e.g., when searching for tweets sent from the continental US). This is typically because those tweets returned a large bounding box that overlapped with the area of interest. This function converts boxes into their geographical midpoints, which works well in the vast majority of cases, but sometimes includes an otherwise puzzling result.

Value

Returns updated data object with full information latitude and longitude vars.

See Also

```
Other geo: lookup_coords
```

Examples

```
## Not run:
## stream tweets sent from the US
rt <- stream_tweets(lookup_coords("usa"), timeout = 10)
## use lat_lng to recover full information geolocation data
rtll <- lat_lng(rt)
## plot points
with(rtll, plot(lng, lat))
## End(Not run)</pre>
```

lists_members

Get Twitter list members (users on a given list).

Description

```
Get Twitter list members (users on a given list).
Get Twitter list memberships (lists containing a given user)
```

Usage

```
lists_members(list_id = NULL, slug = NULL, owner_user = NULL,
  n = 5000, cursor = "-1", token = NULL, parse = TRUE, ...)

lists_memberships(user = NULL, n = 200, cursor = "-1",
  filter_to_owned_lists = FALSE, token = NULL, parse = TRUE,
  previous_cursor = NULL)
```

29 lists_members

Arguments

list_id

owner_user

required The numerical id of the list. required You can identify a list by its slug instead of its numerical id. If you slug decide to do so, note that you'll also have to specify the list owner using the owner_id or owner_user parameters.

optional The screen name or user ID of the user who owns the list being re-

quested by a slug.

Specifies the number of results to return per page (see cursor below). For 'list_memberships()', the default and max is 200 per page. Twitter technically allows up to 1,000 per page, but above 200 frequently results in an over capacity error. For 'lists_members()', the default, and max number of users per list, is

5,000.

optional Breaks the results into pages. Provide a value of -1 to begin pagcursor

ing. Provide values as returned in the response body's next_cursor and previ-

ous_cursor attributes to page back and forth in the list.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

> this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

parse Logical indicating whether to convert the response object into an R list. Defaults

to TRUE.

Other arguments used as parameters in query composition.

The user id or screen name of the user for whom to return results for. user

filter_to_owned_lists

When set to true . t or 1, will return just lists the authenticating user owns, and

the user represented by user_id or screen_name is a member of.

previous_cursor

If you wish to use previous cursor instead of next, input value here to override

next cursor.

Details

Due to deleted or removed lists, the returned number of memberships is often less than the provided n value. This is a reflection of the API and not a unique quirk of rtweet.

Value

Either a nested list (if parsed) or an HTTP response object.

See Also

Other lists: lists_statuses, lists_subscribers, lists_subscriptions, lists_users

30 lists_statuses

Examples

```
## Not run:
## get list members for a list of polling experts using list_id
(pollsters <- lists_members("105140588"))</pre>
## get list members of cspan's senators list
sens <- lists_members(slug = "senators", owner_user = "cspan")</pre>
sens
## get list members for an rstats list using list topic slug
## list owner's screen name
rstats <- lists_members(slug = "rstats", owner_user = "scultrera")</pre>
rstats
## End(Not run)
## Not run:
## get up to 1000 Twitter lists that include Nate Silver
ns538 <- lists_memberships("NateSilver538", n = 1000)</pre>
## view data
ns538
## End(Not run)
```

lists_statuses

Get a timeline of tweets authored by members of a specified list.

Description

Get a timeline of tweets authored by members of a specified list.

Usage

```
lists_statuses(list_id = NULL, slug = NULL, owner_user = NULL,
    since_id = NULL, max_id = NULL, n = 200, include_rts = TRUE,
    parse = TRUE, token = NULL)
```

Arguments

list_id required The numerical id of the list.

slug required You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the

owner_id or owner_screen_name parameters.

lists_subscribers 31

owner_user	optional The screen name or user ID of the user who owns the list being requested by a slug.
since_id	optional Returns results with an ID greater than (that is, more recent than) the specified ID. There are limits to the number of Tweets which can be accessed through the API. If the limit of Tweets has occurred since the since_id, the since_id will be forced to the oldest ID available.
max_id	optional Returns results with an ID less than (that is, older than) or equal to the specified ID.
n	optional Specifies the number of results to retrieve per "page."
include_rts	optional When set to either true, t or 1, the list timeline will contain native retweets (if they exist) in addition to the standard stream of tweets. The output format of retweeted tweets is identical to the representation you see in home_timeline.
parse	Logical indicating whether to convert the response object into an R list. Defaults to TRUE.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Value

data

See Also

Other lists: lists_members, lists_subscribers, lists_subscriptions, lists_users

Other tweets: get_favorites, get_mentions, get_my_timeline, get_timeline, lookup_statuses, search_tweets, tweets_data, tweets_with_users

lists_subscribers

Get subscribers of a specified list.

Description

Get subscribers of a specified list.

Usage

```
lists_subscribers(list_id = NULL, slug = NULL, owner_user = NULL,
    n = 20, cursor = "-1", parse = TRUE, token = NULL)
```

32 lists_subscribers

Arguments

required The numerical id of the list. list_id slug required You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner_id or owner_user parameters. owner_user optional The screen name or user ID of the user who owns the list being requested by a slug. optional Specifies the number of results to return per page (see cursor below). n The default is 20, with a maximum of 5,000. cursor semi-optional Causes the collection of list members to be broken into "pages" of consistent sizes (specified by the count parameter). If no cursor is provided, a value of -1 will be assumed, which is the first "page." The response from the API will include a previous_cursor and next_cursor to allow paging back and forth. See Using cursors to navigate collections for more information.

Logical indicating whether to convert the response object into an R list. Defaults

to TRUE.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

See Also

parse

```
Other lists: lists_members, lists_statuses, lists_subscriptions, lists_users
```

Other users: as_screenname, lookup_users, search_users, tweets_with_users, users_data

```
## Not run:
## get subscribers of new york times politics list
rstats <- lists_subscribers(
    slug = "new-york-times-politics",
    owner_user = "nytpolitics",
    n = 1000
)
## End(Not run)</pre>
```

lists_subscriptions 33

lists_subscriptions Get list subscriptions of a given user.

Description

Get list subscriptions of a given user.

Usage

```
lists_subscriptions(user, n = 20, cursor = "-1", parse = TRUE,
  token = NULL)
```

Arguments

user	Either the user ID or screen name of user.
n	Specifies the number of results to return per page (see cursor below). The default is 20, with a maximum of 1000.
cursor	Causes the collection of list members to be broken into "pages" of consistent sizes (specified by the count parameter). If no cursor is provided, a value of -1 will be assumed, which is the first "page." The response from the API will include a previous_cursor and next_cursor to allow paging back and forth. See Using cursors to navigate collections for more information.
parse	Logical indicating whether to convert the response object into an R list. Defaults

to TRUE.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

See Also

```
Other lists: lists_members, lists_statuses, lists_subscribers, lists_users
```

```
## Not run:
## get subscriptions of new york times politics list
rstats <- lists_subscriptions(
    slug = "new-york-times-politics",
    n = 1000
)
## End(Not run)</pre>
```

lists_users

lists_users

Get all lists a specified user subscribes to, including their own.

Description

Get all lists a specified user subscribes to, including their own.

Usage

```
lists_users(user, reverse = FALSE, token = NULL, parse = TRUE)
```

Arguments

user The ID of the user or screen name for whom to return results.

reverse optional Set this to true if you would like owned lists to be returned first. See

description above for information on how this parameter works.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

parse Logical indicating whether to convert the response object into an R list. Defaults

to TRUE.

Value

data

See Also

Other lists: lists_members, lists_statuses, lists_subscribers, lists_subscriptions

```
## Not run:
## get lists subsribed to by Nate Silver
lists_users("NateSilver538")
## End(Not run)
```

lookup_collections 35

ctions Get collections by user or status id.
--

Description

Return data for specified collection (themed grouping of Twitter statuses). Response data varies significantly compared to most other users and tweets data objects returned in this package.

Usage

```
lookup_collections(id, n = 200, parse = TRUE, token = NULL, ...)
```

Arguments

id	required. The identifier of the Collection to return results for e.g., "custom-539487832448843776"
n	Specifies the maximum number of results to include in the response. Specify count between 1 and 200.
parse	Logical indicating whether to convert response object into nested list. Defaults to true.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.
	Other arguments passed along to composed request query.

Value

Return object converted to nested list if parsed otherwise an HTTP response object is returned.

```
## Not run:
## lookup a specific collection
cc <- lookup_collections("custom-539487832448843776")
## inspect data
str(cc)
## End(Not run)</pre>
```

36 lookup_coords

lookup_coords	Get coordinates of specified location.	
---------------	--	--

Description

Convenience function for looking up latitude/longitude coordinate information for a given location. Returns data as a special "coords" object, which is specifically designed to interact smoothly with other relevant package functions. NOTE: USE OF THIS FUNCTION REQUIRES A VALID GOOGLE MAPS API KEY.

Usage

```
lookup_coords(address, components = NULL, apikey = NULL, ...)
```

Arguments

address	Desired location typically in the form of place name, subregion, e.g., address = "lawrence, KS". Also accepts the name of countries, e.g., address = "usa", address = "brazil" or states, e.g., address = "missouri" or cities, e.g., address = "chicago". In most cases using only address should be sufficient.
components	Unit of analysis for address e.g., components = "country:US". Potential components include postal_code, country, administrative_area, locality, route.
apikey	A valid Google Maps API key. If NULL, 'lookup_coords()' will look for a relevant API key stored as an environment variable (e.g., 'GOOGLE_MAPS_KEY').
	Additional arguments passed as parameters in the HTTP request

Value

Object of class coords.

See Also

```
Other geo: lat_lng
```

```
## Not run:
## get coordinates associated with the following addresses/components
sf <- lookup_coords("san francisco, CA", "country:US")
usa <- lookup_coords("usa")
lnd <- lookup_coords("london")
bz <- lookup_coords("brazil")

## pass a returned coords object to search_tweets
bztw <- search_tweets(geocode = bz)</pre>
```

lookup_friendships 37

```
## or stream tweets
ustw <- stream_tweets(usa, timeout = 10)
## End(Not run)</pre>
```

lookup_friendships

Lookup friendship information between two specified users.

Description

Gets information on friendship between two Twitter users.

Usage

```
lookup_friendships(source, target, parse = TRUE, token = NULL)
```

Arguments

source Screen name or user id of source user.
target Screen name or user id of target user.

parse Logical indicating whether to return parsed data frame. Defaults to true.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Value

Data frame converted form returned JSON object. If parse is not true, the HTTP response object is returned instead.

See Also

Other friends: my_friendships

38 lookup_statuses

lookup_statuses

Get tweets data for given statuses (status IDs).

Description

Returns data on up to 90,000 Twitter statuses. To return data on more than 90,000 statuses, users must iterate through status IDs whilst avoiding rate limits, which reset every 15 minutes.

Usage

```
lookup_statuses(statuses, parse = TRUE, token = NULL)
lookup_tweets(statuses, parse = TRUE, token = NULL)
```

Arguments

statuses User id or screen name of target user.

parse Logical, indicating whether or not to parse return object into data frame(s).

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Value

A tibble of tweets data.

See Also

```
https://developer.twitter.com/en/docs/tweets/post-and-engage/api-reference/get-statuses-lookup
Other tweets: get_favorites, get_mentions, get_my_timeline, get_timeline, lists_statuses,
search_tweets, tweets_data, tweets_with_users
```

```
## Not run:
## create object containing status IDs
statuses <- c(
    "567053242429734913",
    "266031293945503744",
    "440322224407314432"
)

## lookup tweets data for given statuses
tw <- lookup_statuses(statuses)</pre>
```

lookup_users 39

tw

```
## End(Not run)
```

lookup_users

Get Twitter users data for given users (user IDs or screen names).

Description

Returns data on up to 90,000 Twitter users. To return data on more than 90,000 users, code must be written to iterate through user IDs whilst avoiding rate limits, which reset every 15 minutes.

Usage

```
lookup_users(users, parse = TRUE, token = NULL)
```

Arguments

users User id or screen name of target user.

parse Logical, indicating whether or not to parse return object into data frame(s).

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

Value

A tibble of users data.

See Also

```
\verb|https://developer.twitter.com/en/docs/accounts-and-users/follow-search-get-users/api-reference/get-users-lookup|
```

Other users: as_screenname, lists_subscribers, search_users, tweets_with_users, users_data

```
## Not run:
## select one or more twitter users to lookup
users <- c(
  "potus", "hillaryclinton", "realdonaldtrump",
  "fivethirtyeight", "cnn", "espn", "twitter"
)</pre>
```

40 my_friendships

```
## get users data
usr_df <- lookup_users(users)

## view users data
usr_df

## view tweet data for these users via tweets_data()
tweets_data(usr_df)

## End(Not run)</pre>
```

my_friendships

Lookup friendship information between users.

Description

Gets information on friendship between authenticated user and up to 100 other users.

Usage

```
my_friendships(user, parse = TRUE, token = NULL)
```

Arguments

user Screen name or user id of target user.

parse Logical indicating whether to return parsed data frame. Defaults to true.

token OAuth token. By default token = NULL fetches a non-exhausted token from

an environment variable. Find instructions on how to create tokens and setup an environment variable in the tokens vignette (in r, send ?tokens to console).

Value

Data frame converted form returned JSON object. If parse is not true, the HTTP response object is returned instead.

See Also

Other friends: lookup_friendships

next_cursor 41

next_cursor

next_cursor/previous_cursor/max_id

Description

Method for returning next value (used to request next page or results) object returned from Twitter APIs.

Paginate in reverse (limited integration)

Get the newest ID collected to date.

Usage

```
next_cursor(x)
max_id(.x)
previous_cursor(x)
since_id(.x)
```

Arguments

x Data object returned by Twitter API.

.x id

Value

Character string of next cursor value used to retrieved the next page of results. This should be used to resume data collection efforts that were interrupted by API rate limits. Modify previous data request function by entering the returned value from next_cursor for the page argument.

See Also

```
Other ids: get_followers, get_friends
Other extractors: tweets_data, users_data
Other ids: get_followers, get_friends
Other extractors: tweets_data, users_data
```

```
## Not run:
## Retrieve user ids of accounts following POTUS
f1 <- get_followers("potus", n = 75000)
## store next_cursor in page</pre>
```

42 parse_stream

```
page <- next_cursor(f1)

## max. number of ids returned by one token is 75,000 every 15

## minutes, so you'll need to wait a bit before collecting the

## next batch of ids

sys.Sleep(15 * 60) ## Suspend execution of R expressions for 15 mins

## Use the page value returned from \code{next_cursor} to continue

## where you left off.

f2 <- get_followers("potus", n = 75000, page = page)

## combine

f <- do.call("rbind", list(f1, f2))

## count rows

nrow(f)

## End(Not run)</pre>
```

parse_stream

Converts Twitter stream data (JSON file) into parsed data frame.

Description

Converts Twitter stream data (JSON file) into parsed data frame.

Usage

```
parse_stream(path, ...)
```

Arguments

path Character, name of JSON file with data collected by stream_tweets.
... Other arguments passed on to internal data_from_stream function.

Value

A tbl of tweets data with attribute of users data

See Also

Other stream tweets: stream_tweets

plain_tweets 43

Examples

```
## Not run:
## run and save stream to JSON file
stream_tweets(
    "the,a,an,and", timeout = 60,
    file_name = "theaanand.json",
    parse = FALSE
)

## parse stream file into tibble data frame
rt <- parse_stream("theaanand.json")

## End(Not run)</pre>
```

plain_tweets

Clean up character vector (tweets) to more of a plain text.

Description

Clean up character vector (tweets) to more of a plain text.

Usage

```
plain_tweets(x)
```

Arguments

Х

The desired character vector or data frame/list with named column/element "text" to be cleaned and processed.

Value

Data reformatted with ascii encoding and normal ampersands and without URL links, line breaks, fancy spaces/tabs, fancy apostrophes,

post_favorite

Favorites target status id.

Description

Favorites target status id.

```
post_favorite(status_id, destroy = FALSE, include_entities = FALSE,
  token = NULL)
```

44 post_follow

Arguments

status_id Status id of target tweet.

destroy Logical indicating whether to post (add) or remove (delete) target tweet as fa-

vorite.

include_entities

Logical indicating whether to include entities object in return.

token OAuth token. By default token = NULL fetches a non-exhausted token from an

environment variable tokens.

See Also

```
Other post: post_follow, post_friendship, post_tweet
```

Examples

```
## Not run:
rt <- search_tweets("rstats")
r <- lapply(rt$user_id, post_favorite)
## End(Not run)</pre>
```

post_follow

Follows target twitter user.

Description

Follows target twitter user.

Usage

```
post_follow(user, destroy = FALSE, mute = FALSE, notify = FALSE,
  retweets = TRUE, token = NULL)

post_unfollow_user(user, token = NULL)

post_mute(user, token = NULL)
```

Arguments

user Screen name or user id of target user.

destroy Logical indicating whether to post (add) or remove (delete) target tweet as fa-

vorite.

mute Logical indicating whether to mute the intended friend (you must already be

following this account prior to muting them)

notify Logical indicating whether to enable notifications for target user. Defaults to

false.

post_friendship 45

retweets Logical indicating whether to enable retweets for target user. Defaults to true.

token OAuth token. By default token = NULL fetches a non-exhausted token from an

environment variable tokens.

See Also

Other post: post_favorite, post_friendship, post_tweet

Examples

```
## Not run:
post_follow("BarackObama")
## End(Not run)
```

post_friendship

Updates friendship notifications and retweet abilities.

Description

Updates friendship notifications and retweet abilities.

Usage

```
post_friendship(user, device = FALSE, retweets = FALSE, token = NULL)
```

Arguments

user Screen name or user id of target user.

device Logical indicating whether to enable or disable device notifications from target

user behaviors. Defaults to false.

retweets Logical indicating whether to enable or disable retweets from target user behav-

iors. Defaults to false.

token OAuth token. By default token = NULL fetches a non-exhausted token from an

environment variable tokens.

See Also

Other post: post_favorite, post_follow, post_tweet

post_list

post_list	Manage Twitter lists
-----------	----------------------

Description

Create, add users, and destroy Twitter lists

Usage

```
post_list(users = NULL, name = NULL, description = NULL,
    private = FALSE, destroy = FALSE, list_id = NULL, slug = NULL,
    token = NULL)
```

Arguments

users	Character vectors of users to be added to list.
name	Name of new list to create.
description	Optional, description of list (single character string).
private	Logical indicating whether created list should be private. Defaults to false, meaning the list would be public. Not applicable if list already exists.
destroy	Logical indicating whether to delete a list. Either 'list_id' or 'slug' must be provided if 'destroy = TRUE'.
list_id	Optional, numeric ID of list.
slug	Optional, list slug.
token	OAuth token associated with user who owns [or will own] the list of interest.

Value

Response object from HTTP request.

Examples

```
## Not run:
## CNN twitter accounts
users <- c("cnn", "cnnbrk", "cnni", "cnnpolitics", "cnnmoney",
    "cnnnewsroom", "cnnspecreport", "CNNNewsource",
    "CNNNSdigital", "CNNTonight")

## create CNN-accounts list with 9 total users
(cnn_lst <- post_list(users,
    "cnn-accounts", description = "Official CNN accounts"))

## view list in browser
browseURL(sprintf("https://twitter.com/%s/lists/cnn-accounts",</pre>
```

Token must have write permissions!

post_message 47

```
rtweet:::home_user()))
## search for more CNN users
cnn_users <- search_users("CNN", n = 200)</pre>
## filter and select more users to add to list
more_users <- cnn_users %>%
 subset(verified & !tolower(screen_name) %in% tolower(users)) %>%
  .$screen_name %>%
 grep("cnn", ., ignore.case = TRUE, value = TRUE)
## add more users to list- note: can only add up to 100 at a time
post_list(users = more_users, slug = "cnn-accounts")
## view updated list in browser (should be around 100 users)
browseURL(sprintf("https://twitter.com/%s/lists/cnn-accounts",
 rtweet:::home_user()))
## select users on list without "cnn" in their name field
drop_users <- cnn_users %>%
 subset(screen_name %in% more_users & !grepl("cnn", name, ignore.case = TRUE)) %>%
  .$screen_name
## drop these users from the cnn list
post_list(users = drop_users, slug = "cnn-accounts",
 destroy = TRUE)
## view updated list in browser (should be around 100 users)
browseURL(sprintf("https://twitter.com/%s/lists/cnn-accounts",
 rtweet:::home_user()))
## delete list entirely
post_list(slug = "cnn-accounts", destroy = TRUE)
## End(Not run)
```

post_message

Posts direct message from user's Twitter account

Description

Posts direct message from user's Twitter account

```
post_message(text, user, media = NULL, token = NULL)
```

48 post_tweet

Arguments

text	Character, text of message.
user	Screen name or user ID of message target.
media	File path to image or video media to be included in tweet.
token	OAuth token. By default token = NULL fetches a non-exhausted token from an environment variable tokens.

post_tweet

Posts status update to user's Twitter account

Description

Posts status update to user's Twitter account

Usage

```
post_tweet(status = "my first rtweet #rstats", media = NULL,
  token = NULL, in_reply_to_status_id = NULL, destroy_id = NULL,
  retweet_id = NULL)
```

Arguments

status Character, tweet status. Must be 140 characters or less. media File path to image or video media to be included in tweet. OAuth token. By default token = NULL fetches a non-exhausted token from an token environment variable tokens. in_reply_to_status_id Status ID of tweet to which you'd like to reply. Note: in line with the Twitter API, this parameter is ignored unless the author of the tweet this parameter references is mentioned within the status text. destroy_id To delete a status, supply the single status ID here. If a character string is supplied, overriding the default (NULL), then a destroy request is made (and the status text and media attachments) are irrelevant. To retweet a status, supply the single status ID here. If a character string is retweet_id supplied, overriding the default (NULL), then a retweet request is made (and

the status text and media attachments) are irrelevant.

See Also

Other post: post_favorite, post_follow, post_friendship

rate_limit 49

Examples

```
## generate data to make/save plot (as a .png file)
x <- rnorm(300)
y <- x + rnorm(300, 0, .75)
col <- c(rep("#002244aa", 50), rep("#440000aa", 50))
bg <- c(rep("#6699ffaa", 50), rep("#dd6666aa", 50))</pre>
## crate temporary file name
tmp <- tempfile(fileext = ".png")</pre>
## save as png
png(tmp, 6, 6, "in", res = 127.5)
par(tcl = -.15, family = "Inconsolata",
    font.main = 2, bty = "n", xaxt = "1", yaxt = "1",
    bg = "#f0f0f0", mar = c(3, 3, 2, 1.5))
plot(x, y, xlab = NULL, ylab = NULL, pch = 21, cex = 1,
     bg = bg, col = col,
     main = "This image was uploaded by rtweet")
grid(8, lwd = .15, lty = 2, col = "#00000088")
dev.off()
## post tweet with media attachment
post_tweet("a tweet with media attachment", media = tmp)
# example of replying within a thread
## first post
post_tweet(status="first in a thread")
## lookup status_id
my_timeline <- get_timeline(rtweet:::home_user())</pre>
## ID for reply
reply_id <- my_timeline$status_id[1]</pre>
## post reply
post_tweet("second in the thread",
  in_reply_to_status_id = reply_id)
## End(Not run)
```

rate_limit

Get rate limit data for given Twitter access tokens.

Description

Returns rate limit information for one or more Twitter tokens, optionally filtered by rtweet function or specific Twitter API path(s)

50 rate_limit

Usage

```
rate_limit(token = NULL, query = NULL, parse = TRUE)
rate_limits(token = NULL, query = NULL, parse = TRUE)
```

Arguments

token One or more OAuth tokens. By default token = NULL fetches a non-exhausted

token from an environment variable. Find instructions on how to create tokens and setup an environment variable in the tokens vignette (in r, send ?tokens to

console).

query Specific API (path) or a character function name, e.g., query = "get_timelines",

used to subset the returned data. If null, this function returns entire rate limit request object as a tibble data frame. Otherwise, query returns specific values matching the query of interest; e.g., query = "lookup/users" returns remaining limit for user lookup requests; type = "followers/ids" returns remaining limit for follower id requests; type = "friends/ids" returns remaining limit for friend id

requests.

parse Logical indicating whether to parse response object into a data frame.

Details

If multiple tokens are provided, this function will return the names of the associated [token] applications as new variable (column) or as a named element (if parse = FALSE).

Value

Tibble data frame with rate limit information pertaining to the limit (max allowed), remaining (specific to token), reset (minutes until reset), and reset_at (time of rate limit reset). If query is specified, only relevant rows are returned.

See Also

```
https://developer.twitter.com/en/docs/developer-utilities/rate-limit-status/api-reference/get-application-rate_limit_status

Other tokens: create_token, get_tokens
```

```
## Not run:
## get all rate_limit information for default token
rate_limit()
## get rate limit info for API used in lookup_statuses
rate_limit("lookup_statuses")
## get rate limit info for specific token
```

read_twitter_csv 51

```
token <- get_tokens()
rate_limit(token)
rate_limit(token, "search_tweets")
## End(Not run)</pre>
```

read_twitter_csv

Read comma separated value Twitter data.

Description

Reads Twitter data that was previously saved as a CSV file.

Usage

```
read_twitter_csv(file, unflatten = FALSE)
```

Arguments

file Name of CSV file.

unflatten Logical indicating whether to unflatten (separate hasthags and mentions columns

on space, converting characters to lists), defaults to FALSE.

Value

A tbl data frame of Twitter data

See Also

```
Other datafiles: flatten, write_as_csv
```

```
## Not run:
## read in data.csv
rt <- read_twitter_csv("data.csv")
## End(Not run)</pre>
```

round_time

A generic function for rounding date and time values

Description

A generic function for rounding date and time values

Usage

```
round_time(x, n, tz)
```

Arguments

x A vector of class POSIX or Date.

n Unit to round to. Defaults to mins. Numeric values treated as seconds. Other-

wise this should be one of "mins", "hours", "days", "weeks", "months", "years"

(plural optional).

tz Time zone to be used, defaults to "UTC" (Twitter default)

Value

If POSIXct then POSIX. If date then Date.

Examples

```
## class posixct
round_time(Sys.time(), "12 hours")

## class date
unique(round_time(seq(Sys.Date(), Sys.Date() + 100, "1 day"), "weeks"))
```

search_tweets

Get tweets data on statuses identified via search query.

Description

Returns Twitter statuses matching a user provided search query. ONLY RETURNS DATA FROM THE PAST 6-9 DAYS. To return more than 18,000 statuses in a single call, set "retryonratelimit" to TRUE.

search_tweets2 Passes all arguments to search_tweets. Returns data from one OR MORE search queries.

Usage

```
search_tweets(q, n = 100, type = "recent", include_rts = TRUE,
  geocode = NULL, max_id = NULL, parse = TRUE, token = NULL,
  retryonratelimit = FALSE, verbose = TRUE, ...)
search_tweets2(...)
```

Arguments

q

Query to be searched, used to filter and select tweets to return from Twitter's REST API. Must be a character string not to exceed maximum of 500 characters. Spaces behave like boolean "AND" operator. To search for tweets containing at least one of multiple possible terms, separate each search term with spaces and "OR" (in caps). For example, the search q = "data science" looks for tweets containing both "data" and "science" anywhere located anywhere in the tweets and in any order. When "OR" is entered between search terms, query = "data OR science", Twitter's REST API should return any tweet that contains either "data" or "science." It is also possible to search for exact phrases using double quotes. To do this, either wrap single quotes around a search query using double quotes, e.g., q = ''data science'' or escape each internal double quote with a single backslash, e.g., q = "\"data science\"".

n

Integer, specifying the total number of desired tweets to return. Defaults to 100. Maximum number of tweets returned from a single token is 18,000. To return more than 18,000 tweets, users are encouraged to set retryonratelimit to TRUE. See details for more information.

type

Character string specifying which type of search results to return from Twitter's REST API. The current default is type = "recent", other valid types include type = "mixed" and type = "popular".

include_rts

Logical, indicating whether to include retweets in search results. Retweets are classified as any tweet generated by Twitter's built-in "retweet" (recycle arrows) function. These are distinct from quotes (retweets with additional text provided from sender) or manual retweets (old school method of manually entering "RT" into the text of one's tweets).

geocode

Geographical limiter of the template "latitude,longitude,radius" e.g., geocode = "37.78, -122.40, 1mi".

max_id

Character, returns results with an ID less than (that is, older than) or equal to 'max_id'. Especially useful for large data returns that require multiple iterations interrupted by user time constraints. For searches exceeding 18,000 tweets, users are encouraged to take advantage of rtweet's internal automation procedures for waiting on rate limits by setting retryonratelimit argument to TRUE. It some cases, it is possible that due to processing time and rate limits, retrieving several million tweets can take several hours or even multiple days. In these cases, it would likely be useful to leverage retryonratelimit for sets of tweets and max_id to allow results to continue where previous efforts left off.

parse

Logical, indicating whether to return parsed data.frame, if true, or nested list, if false. By default, parse = TRUE saves users from the wreck of time and frustration associated with disentangling the nasty nested list returned from Twitter's

API. As Twitter's APIs are subject to change, this argument would be especially useful when changes to Twitter's APIs affect performance of internal parsers. Setting parse = FALSE also ensures the maximum amount of possible information is returned. By default, the rtweet parse process returns nearly all bits of information returned from Twitter. However, users may occasionally encounter new or omitted variables. In these rare cases, the nested list object will be the only way to access these variables.

token

Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

retryonratelimit

Logical indicating whether to wait and retry when rate limited. This argument is only relevant if the desired return (n) exceeds the remaining limit of available requests (assuming no other searches have been conducted in the past 15 minutes, this limit is 18,000 tweets). Defaults to false. Set to TRUE to automate process of conducting big searches (i.e., n > 18000). For many search queries, esp. specific or specialized searches, there won't be more than 18,000 tweets to return. But for broad, generic, or popular topics, the total number of tweets within the REST window of time (7-10 days) can easily reach the millions.

verbose

Logical, indicating whether or not to include output processing/retrieval messages. Defaults to TRUE. For larger searches, messages include rough estimates for time remaining between searches. It should be noted, however, that these time estimates only describe the amount of time between searches and not the total time remaining. For large searches conducted with retryonratelimit set to TRUE, the estimated retrieval time can be estimated by dividing the number of requested tweets by 18,000 and then multiplying the quotient by 15 (token reset time, in minutes).

. . .

Further arguments passed as query parameters in request sent to Twitter's REST API. To return only English language tweets, for example, use lang = "en". For more options see Twitter's API documentation.

Details

Twitter API documentation recommends limiting searches to 10 keywords and operators. Complex queries may also produce API errors preventing recovery of information related to the query. It should also be noted Twitter's search API does not consist of an index of all Tweets. At the time of searching, the search API index includes between only 6-9 days of Tweets.

Number of tweets returned will often be less than what was specified by the user. This can happen because (a) the search query did not return many results (the search pool is already thinned out from the population of tweets to begin with), (b) because user hitting rate limit for a given token, or (c) of recent activity (either more tweets, which affect pagination in returned results or deletion of tweets). To return more than 18,000 tweets in a single call, users must set retryonratelimit argument to true. This method relies on updating the max_id parameter and waiting for token rate limits to refresh between searches. As a result, it is possible to search for 50,000, 100,000, or even 10,000,000 tweets, but these searches can take hours or even days. At these durations, it would not

be uncommon for connections to timeout. Users are instead encouraged to breakup data retrieval into smaller chunks by leveraging retryonratelimit and then using the status_id of the oldest tweet as the max_id to resume searching where the previous efforts left off.

Value

List object with tweets and users each returned as a data frame.

A tbl data frame with additional "query" column.

See Also

```
https://developer.twitter.com/en/docs/tweets/search/api-reference/get-search-tweets
Other tweets: get_favorites, get_mentions, get_my_timeline, get_timeline, lists_statuses,
lookup_statuses, tweets_data, tweets_with_users
```

```
## Not run:
## search for 1000 tweets mentioning Hillary Clinton
hrc <- search_tweets(q = "hillaryclinton", n = 1000)</pre>
## data frame where each observation (row) is a different tweet
## users data also retrieved. can access it via users_data()
users_data(hrc)
## search for 1000 tweets in English
djt <- search_tweets(q = "realdonaldtrump", n = 1000, lang = "en")</pre>
## preview tweets data
djt
## preview users data
users_data(djt)
## exclude retweets
rt <- search_tweets("rstats", n = 500, include_rts = FALSE)</pre>
## perform search for lots of tweets
rt <- search_tweets(</pre>
  "trump OR president OR potus", n = 100000,
  retryonratelimit = TRUE
## plot time series of tweets frequency
ts_plot(rt, by = "mins")
## make multiple independent search queries
```

search_users

```
ds <- Map(
  "search_tweets",
 c("\"data science\"", "rstats OR python"),
  n = 1000
)
## bind by row whilst preserving users data
ds <- do_call_rbind(ds)</pre>
## preview tweets data
ds
## preview users data
users_data(ds)
## End(Not run)
## Not run:
## search using multilple queries
st2 <- search_tweets2(</pre>
  c("\"data science\"", "rstats OR python"),
  n = 500
)
## preview tweets data
st2
## preview users data
users_data(st2)
## check breakdown of results by search query
table(st2$query)
## End(Not run)
```

search_users

Get users data on accounts identified via search query.

Description

Returns data for up to 1,000 users matched by user provided search query.

```
search_users(q, n = 100, parse = TRUE, token = NULL,
  verbose = TRUE)
```

search_users 57

Arguments

q

Query to be searched, used in filtering relevant tweets to return from Twitter's REST API. Should be a character string not to exceed 500 characters maximum. Spaces are assumed to function like boolean "AND" operators. To search for tweets including one of multiple possible terms, separate search terms with spaces and the word "OR". For example, the search query = "data science" searches for tweets using both "data" and "science" though the words can appear anywhere and in any order in the tweet. However, when OR is added between search terms, query = "data OR science", Twitter's REST API should return any tweet that includes either "data" or "science" appearing in the tweets. At this time, Twitter's users/search API does not allow complex searches or queries targeting exact phrases as is allowed by search_tweets.

n Numeric, specifying the total number of desired users to return. Defaults to 100.

Maximum number of users returned from a single search is 1,000.

parse Logical, indicating whether to return parsed (data.frames) or nested list object.

By default, parse = TRUE saves users from the time [and frustrations] associ-

ated with disentangling the Twitter API return objects.

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

verbose Logical, indicating whether or not to output processing/retrieval messages.

Value

Data frame of users returned by query.

See Also

```
https://dev.twitter.com/overview/documentation
```

Other users: as_screenname, lists_subscribers, lookup_users, tweets_with_users, users_data

```
## Not run:
## search for up to 1000 users using the keyword rstats
rstats <- search_users(q = "rstats", n = 1000)
## data frame where each observation (row) is a different user
rstats
## tweets data also retrieved. can access it via tweets_data()
tweets_data(rstats)</pre>
```

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```
## End(Not run)
```

stopwordslangs

Twitter stop words in multiple languages data.

Description

This data comes form a group of Twitter searches conducted at several times during the calendar year of 2017. The data are commonly observed words associated with 10 different languages, including c("ar", "en", "es", "fr", "in", "ja", "pt", "ru", "tr", "und"). Variables include "word" (potential stop words), "lang" (two or three word code), and "p" (probability value associated with frequency position along a normal distribution with higher values meaning the word occurs more frequently and lower values meaning the words occur less frequently).

Usage

stopwordslangs

Format

A tibble with three variables and 24,000 observations

Examples

head(stopwordslangs)

stream_tweets

Collect a live stream of Twitter data.

Description

Returns public statuses via one of the following four methods:

- 1. Sampling a small random sample of all publicly available tweets
- 2. Filtering via a search-like query (up to 400 keywords)
- 3. Tracking via vector of user ids (up to 5000 user_ids)
- 4. Location via geo coordinates (1-360 degree location boxes)

Stream with hardwired reconnection method to ensure timeout integrity.

```
stream_tweets(q = "", timeout = 30, parse = TRUE, token = NULL,
  file_name = NULL, verbose = TRUE, ...)
stream_tweets2(..., dir = NULL, append = FALSE)
```

stream_tweets 59

Arguments

q Query used to select and customize streaming collection method. There are four

possible methods. (1) The default, q = "", returns a small random sample of all publicly available Twitter statuses. (2) To filter by keyword, provide a comma separated character string with the desired phrase(s) and keyword(s). (3) Track users by providing a comma separated list of user IDs or screen names. (4) Use four latitude/longitude bounding box points to stream by geo location. This

must be provided via a vector of length 4, e.g., c(-125, 26, -65, 49).

timeout Numeric scalar specifying amount of time, in seconds, to leave connection open

while streaming/capturing tweets. By default, this is set to 30 seconds. To stream indefinitely, use timeout = FALSE to ensure JSON file is not deleted

upon completion or timeout = Inf.

parse Logical, indicating whether to return parsed data. By default, parse = TRUE,

this function does the parsing for you. However, for larger streams, or for automated scripts designed to continuously collect data, this should be set to false as the parsing process can eat up processing resources and time. For other uses, setting parse to TRUE saves you from having to sort and parse the messy list structure returned by Twitter. (Note: if you set parse to false, you can use the

parse_stream function to parse the JSON file at a later point in time.)

token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

file_name Character with name of file. By default, a temporary file is created, tweets are

parsed and returned to parent environment, and the temporary file is deleted.

verbose Logical, indicating whether or not to include output processing/retrieval mes-

sages.

... Insert magical parameters, spell, or potion here. Or filter for tweets by language,

e.g., language = "en".

dir Name of directory in which json files should be written. The default, NULL,

will create a timestamped "stream" folder in the current working directory. If a

dir name is provided that does not already exist, one will be created.

append Logical indicating whether to append or overwrite file name if the file already

exists. Defaults to FALSE, meaning this function will overwrite the preexisting file_name (in other words, it will delete any old file with the same name as file_name) meaning the data will be added as new lines to file if pre-existing.

Value

Tweets data returned as data frame with users data as attribute.

Returns data as expected using original search_tweets function.

See Also

stream_tweets

Other stream tweets: parse_stream

```
## Not run:
## stream tweets mentioning "election" for 90 seconds
e <- stream_tweets("election", timeout = 90)</pre>
## data frame where each observation (row) is a different tweet
## plot tweet frequency
ts_plot(e, "secs")
## stream tweets mentioning Obama for 30 seconds
djt <- stream_tweets("realdonaldtrump", timeout = 30)</pre>
## preview tweets data
djt
## get user IDs of people who mentioned trump
usrs <- users_data(djt)</pre>
## lookup users data
usrdat <- lookup_users(unique(usrs$user_id))</pre>
## preview users data
usrdat
## store large amount of tweets in files using continuous streams
## by default, stream_tweets() returns a random sample of all tweets
## leave the query field blank for the random sample of all tweets.
stream_tweets(
  timeout = (60 * 10),
  parse = FALSE,
  file_name = "tweets1"
stream_tweets(
  timeout = (60 * 10),
  parse = FALSE,
  file_name = "tweets2"
)
## parse tweets at a later time using parse_stream function
tw1 <- parse_stream("tweets1.json")</pre>
tw1
tw2 <- parse_stream("tweets2.json")</pre>
tw2
## streaming tweets by specifying lat/long coordinates
## stream continental US tweets for 5 minutes
```

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```
usa <- stream_tweets(</pre>
  c(-125, 26, -65, 49),
  timeout = 300
)
## use lookup_coords() for a shortcut verson of the above code
usa <- stream_tweets(</pre>
  lookup_coords("usa"),
  timeout = 300
)
## stream world tweets for 5 mins, save to JSON file
## shortcut coords note: lookup_coords("world")
world.old <- stream_tweets(</pre>
  c(-180, -90, 180, 90),
  timeout = (60 * 5),
  parse = FALSE,
  file_name = "world-tweets.json"
)
## read in JSON file
rtworld <- parse_stream("word-tweets.json")</pre>
## world data set with with lat lng coords variables
x <- lat_lng(rtworld)</pre>
## End(Not run)
```

suggested_slugs

Get user [account] suggestions for authenticating user

Description

Returns Twitter's list of suggested user categories.

Usage

```
suggested_slugs(lang = NULL, token = NULL)
suggested_users(slug, lang = NULL, parse = TRUE, token = NULL)
```

Arguments

lang

optional Restricts the suggested categories to the requested language. The language must be specified by the appropriate two letter ISO 639-1 representation.

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token Every user should have their own Oauth (Twitter API) token. By default token = NULL

this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette,

i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

slug required The short name of list or a category

parse Logical indicating whether to parse the returned data into a tibble data frame.

See details for more on the returned users data.

Details

Currently, this parsing process drops all recursive (list) columns, which mostly means you are shorted some entities data. To maximize users data, however, it is recommended to make an additional lookup_users call using the user IDs returned by this function.

Value

List of recommended categories which can be passed along as the "slug" parameter in suggested_users

Recommended users

```
## Not run:
## get slugs
slugs <- suggested_slugs()
## use slugs to get suggested users
suggested_users(slugs$slug[1])
## alternatively, get all users from all slugs in one function
sugs <- all_suggested_users()
## print data
sugs
## for complete users data, lookup user IDs
sugs_usr <- lookup_users(sugs$user_id)
## view users data
sugs_usr</pre>
## End(Not run)
```

suggested_users_all 63

suggested_users_all	Get all user [account]	l suggestions fo	r authenticating user
04660004_400.0_41	Get titt tise. [tiecestiiti	1 5000000000000000000000000000000000000	. commente comments

Description

Returns users data for all users in Twitter's suggested categories.

Usage

```
suggested_users_all(slugs = NULL, parse = TRUE, token = NULL)
```

Arguments

slugs	Optional, one or more slugs returned by suggested_slugs. API rate limits this to 15 max (function will return warnings for slugs provided beyond the remaining limit).
parse	Logical indicating whether to parse the returned data into a tibble data frame. See details for more on the returned users data.
token	Every user should have their own Oauth (Twitter API) token. By default token = NULL this function looks for the path to a saved Twitter token via environment variables (which is what 'create_token()' sets up by default during initial token creation). For instruction on how to create a Twitter token see the tokens vignette, i.e., 'vignettes("auth", "rtweet")' or see ?tokens.

trends_available Available Twitter trends along with associated WOEID.

Description

Available Twitter trends along with associated WOEID.

Usage

```
trends_available(token = NULL, parse = TRUE)
```

Arguments

token	OAuth token. By default token = NULL fetches a non-exhausted token from an environment variable. Find instructions on how to create tokens and setup an environment variable in the tokens vignette (in r, send ?tokens to console).
parse	Logical, indicating whether to return parsed (data.frames) or nested list object. By default, parse = TRUE saves users from the time [and frustrations] associated with disentangling the Twitter API return objects.

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Value

Data frame with WOEID column. WOEID is a Yahoo! Where On Earth ID.

See Also

```
Other trends: get_trends
```

Examples

```
## Not run:
## Retrieve available trends
trends <- trends_available()
trends
## End(Not run)</pre>
```

ts_data

Converts tweets data into time series-like data object.

Description

Returns data containing the frequency of tweets over a specified interval of time.

Usage

```
ts_data(data, by = "days", trim = 0L, tz = "UTC")
```

Arguments

data	Data frame or grouped data frame.
by	Desired interval of time expressed as numeral plus one of "secs", "mins", "hours", "days", "weeks", "months", or "years". If a numeric is provided, the value is assumed to be in seconds.
trim	Number of observations to trim off the front and end of each time series
tz	Time zone to be used, defaults to "UTC" (Twitter default)

Value

Data frame with time, n, and grouping column if applicable.

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Examples

```
## Not run:
## handles of women senators
sens <- c("SenatorBaldwin", "SenGillibrand", "PattyMurray", "SenatorHeitkamp")
## get timelines for each
sens <- get_timeline(sens, n = 3200)
## get single time series for tweets
ts_data(sens)
## using weekly intervals
ts_data(sens, "weeks")
## group by screen name and then use weekly intervals
sens %>%
   dplyr::group_by(screen_name) %>%
   ts_plot("weeks")
## End(Not run)
```

ts_plot

Plots tweets data as a time series-like data object.

Description

Creates a ggplot2 plot of the frequency of tweets over a specified interval of time.

Usage

```
ts_plot(data, by = "days", trim = 0L, tz = "UTC", ...)
```

Arguments

data	Data frame or grouped data frame.
by	Desired interval of time expressed as numeral plus one of "secs", "mins", "hours", "days", "weeks", "months", or "years". If a numeric is provided, the value is assumed to be in seconds.
trim	The number of observations to drop off the beginning and end of the time series.
tz	Time zone to be used, defaults to "UTC" (Twitter default)
	Other arguments passed to geom_line.

tweets_data

Value

If ggplot2 is installed then a ggplot plot object.

Examples

```
## Not run:
## search for tweets containing "rstats"
rt <- search_tweets("rstats", n = 10000)</pre>
## plot frequency in 1 min intervals
ts_plot(rt, "mins")
## plot multiple time series--retweets vs non-retweets
rt %>%
 dplyr::group_by(is_retweet) %>%
 ts_plot("hours")
## compare account activity for some important US political figures
tmls <- get_timeline(</pre>
 c("SenSchumer", "SenGillibrand", "realDonaldTrump"),
 n = 3000
)
## examine all twitter activity using weekly intervals
ts_plot(tmls, "weeks")
## group by screen name and plot each time series
ts_plot(dplyr::group_by(tmls, screen_name), "weeks")
## group by screen name and is_retweet
tmls %>%
 dplyr::group_by(tmls, screen_name, is_retweet) %>%
 ts_plot("months")
## End(Not run)
```

tweets_data

Extracts tweets data from users data object.

Description

Extracts tweets data from users data object.

```
tweets_data(users)
```

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Arguments

users

Parsed data object of users data as returned via search_users, lookup_users,

Value

Tweets data frame.

See Also

```
Other tweets: get_favorites, get_mentions, get_my_timeline, get_timeline, lists_statuses, lookup_statuses, search_tweets, tweets_with_users

Other extractors: next_cursor, users_data
```

Examples

```
## Not run:
## get twitter user data
jack <- lookup_users("jack")

## get data on most recent tweet from user(s)
tweets_data(jack)

## search for 100 tweets containing the letter r
r <- search_tweets("r")

## print tweets data (only first 10 rows are shown)
head(r, 10)

## preview users data
head(users_data(r))

## End(Not run)</pre>
```

tweets_with_users

Parsing data into tweets/users data tibbles

Description

Parsing data into tweets/users data tibbles

```
tweets_with_users(x)
users_with_tweets(x)
```

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Arguments

x Unparsed data returned by rtweet API request.

Value

A tweets/users tibble (data frame) with users/tweets tibble attribute.

See Also

```
Other parsing: do_call_rbind
Other tweets: get_favorites, get_mentions, get_my_timeline, get_timeline, lists_statuses, lookup_statuses, search_tweets, tweets_data
Other parsing: do_call_rbind
Other users: as_screenname, lists_subscribers, lookup_users, search_users, users_data
```

Examples

```
## Not run:
## search with parse = FALSE
rt <- search_tweets("rstats", n = 500, parse = FALSE)

## parse to tweets data tibble with users data attribute object
tweets_with_users(rt)

## search with parse = FALSE
usr <- search_users("rstats", n = 300, parse = FALSE)

## parse to users data tibble with users data attribute object
users_with_tweets(usr)

## End(Not run)</pre>
```

tweet_shot

Capture an image of a tweet/thread

Description

Provide a status id or a full Twitter link to a tweet and this function will capture an image of the tweet — or tweet + thread (if there are Twitter-linked replies) — from the mobile version of said tweet/thread.

```
tweet_shot(statusid_or_url, zoom = 3, scale = TRUE)
```

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Arguments

zoom

statusid_or_url

a valid Twitter status id (e.g. "947082036019388416") or a valid Twitter status URL (e.g. "https://twitter.com/jhollist/status/947082036019388416").

a positive number >= 1. See the help for [webshot::webshot()] for more

information.

scale auto-scale the image back to 1:1? Default it TRUE, which means magick will

be used to return a "normal" sized tweet. Set it to FALSE to perform your own

image manipulation.

Details

For this to work, you will need to ensure the packages in Suggests: are installed as they will be loaded upon the first invocation of this function.

Use the zoom factor to get more pixels which may improve the text rendering of the tweet/thread.

Value

magick object

Examples

```
## Not run:
tweet_shot("947082036019388416")
tweet_shot("https://twitter.com/jhollist/status/947082036019388416")
## End(Not run)
```

users_data

Extracts users data from tweets data object.

Description

Extracts users data from tweets data object.

Usage

```
users_data(tweets)
```

Arguments

tweets Parsed data object of tweets data as returned via get_timeline, search_tweets,

stream_tweets, etc..

Value

Users data frame from tweets returned in a tweets data object.

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See Also

Other users: as_screenname, lists_subscribers, lookup_users, search_users, tweets_with_users
Other extractors: next_cursor, tweets_data

Examples

```
## Not run:
## search for 100 tweets containing the letter r
r <- search_tweets("r")
## print tweets data (only first 10 rows are shown)
head(r, 10)
## extract users data
head(users_data(r))
## End(Not run)</pre>
```

write_as_csv

Save Twitter data as a comma separated value file.

Description

Saves as flattened CSV file of Twitter data.

Usage

```
write_as_csv(x, file_name, prepend_ids = TRUE, na = "",
   fileEncoding = "UTF-8")

save_as_csv(x, file_name, prepend_ids = TRUE, na = "",
   fileEncoding = "UTF-8")
```

Arguments

x Data frame returned by an rtweet function.

file_name Desired name to save file as. If 'file_name' does not include the extension ".csv"

it will be added automatically.

prepend_ids Logical indicating whether to prepend an "x" before all Twitter IDs (for users,

statuses, lists, etc.). It's recommended when saving to CSV as these values otherwise get treated as numeric and as a result the values are often less precise

due to rounding or other class-related quirks. Defaults to true.

na Value to be used for missing (NA)s. Defaults to empty character, "".

fileEncoding Encoding to be used when saving to CSV. defaults to "UTF-8".

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Value

Saved CSV files in current working directory.

See Also

Other datafiles: flatten, read_twitter_csv Other datafiles: flatten, read_twitter_csv

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